

AMENDMENTS TO THE CLAIMS

1. (Original) A method of powering a cold cathode fluorescent light (CCFL) circuit, the method including:
determining a frequency provided to power the CCFL circuit based on a duty cycle of a driving waveform to the CCFL circuit.

2. (Original) The method of Claim 1, wherein the duty cycle of the driving waveform is approximately 50%.

3. (Original) The method of Claim 2, wherein determining the frequency includes sensing a voltage of the driving waveform at a first node.

4. (Original) The method of Claim 3, wherein determining the frequency further includes setting values of a plurality of resistors for sensing the voltage of the driving waveform.

5. (Original) The method of Claim 4, wherein setting values is dependent on a defined duty factor.

6. (Original) The method of Claim 4, wherein setting values is dependent on a high level of the driving waveform.

7. (Original) The method of Claim 4, wherein setting values is dependent on a set reference voltage.

8. (Original) The method of Claim 3, wherein determining a frequency includes generating a first DC signal that is proportional to a time-averaged voltage at the first node.

9. (Currently Amended) A method of powering a cold cathode fluorescent light (CCFL) circuit, the method including:

determining a frequency provided to power the CCFL circuit based on a duty cycle of a driving waveform to the CCFL circuit, wherein the duty cycle is approximately 50%, wherein determining the frequency includes:

sensing a voltage of the driving waveform at a first node;

generating a first DC signal that is proportional to a time-averaged voltage at the first node;

~~The method of Claim 8, further including:~~

sensing a voltage at a second node that is proportional to a CCFL current; and

generating a second DC signal that is proportional to a time-averaged voltage at the second node, wherein the second DC signal is used in determining the frequency.

10. (Original) The method of Claim 9, further including clamping the second DC signal.

11. (Original) The method of Claim 10, further including clamping the first DC signal.

12. (Original) The method of Claim 11, wherein clamping the first DC signal includes selecting one of a plurality of current sources.

13. (Original) The method of Claim 12, further including generating an interrupt signal that controls the driving waveform.

Claims 14-30 (Cancelled)

31. (Currently Amended) A method for controlling a voltage increase on a line in a CCFL circuit, the method including:

limiting the voltage increase to a first predetermined amount based on a first current source and a capacitor; and

selectively resetting a capacitance of the capacitor to zero at the beginning of every dimming cycle of the CCFL circuit, thereby providing to provide a soft start on the line.

32. (Currently Amended) A method for controlling a voltage increase on a line, the method including:

limiting the voltage increase to a first predetermined amount based on a first current source and a capacitor;

selectively resetting a capacitance of the capacitor to zero to provide a soft start on the line; and

~~The method of Claim 31, further including~~ switching to a second current source, thereby limiting the voltage increase to a second predetermined amount based on the second current source and the capacitor.

Claims 33-37 (Cancelled)

38. (Allowed) A method for providing a drive signal to a CCFL circuit, the method comprising:

generating a first pulsed signal for pulling the drive signal up to a first predetermined value during a first transition of an input signal to the driver;

using a first current source to maintain the first predetermined value during a first state of the input signal;

generating a second pulse for pulling the drive signal down to a second predetermined value during a second transition of the input signal; and

using a second current source circuit to maintain the second predetermined value during a second state of the input signal.

39. (Allowed) The method of Claim 38, further including limiting the second predetermined value by using a device with diode characteristics.